

DEPARTMENT OF ECOLOGY

May 21, 2003

TO: MTCA Science Advisory Board

FROM: Pete Kmet

SUBJECT: Issues List and Rule Status Update

At the November 8, 2001 SAB meeting Ecology staff provided the Board with a "short list" of issues we anticipated working on and bringing before the Board for advice in the future.

Attached is that list. Our anticipated schedule for bringing these issues before the Board has been delayed as we have struggled to complete background work on these topics. However, we have made significant progress in several areas and I've noted with a checkmark those issues Ecology TCP Policy staff have been actively been working on.

In addition, since promulgation of the MTCA rule, we have produced or updated the publications on the attached list. We have also provided numerous internal and external training sessions on the MTCA rule.

It is also significant to note that the MTCA rule amendments, while requiring some adjustments in cleanup work, has not resulted in the worse-case scenarios some had thought would result from these amendments.

SAB Issues Short List and Rule Status Update.doc

Publications by Ecology TCP since February, 2001 MTCA Rule Amendment

Basic Tools

94-06	Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC
94-145	Cleanup Levels and Risk Calculations (CLARC)
MTCASGL10.xls	Workbook for Calculating Cleanup Levels for Individual Hazardous Substances
MTCATPH10.xls	Workbook for Calculating Cleanup Levels for Petroleum Contaminated sites
Web Page	Terrestrial Ecologic Evaluation Process—An Interactive Users Guide

Focus Sheets

94-129	Model Toxics Control Act Cleanup Regulation: Process for Cleanup of Hazardous Waste Sites
94-130	Model Toxics Control Act Cleanup Regulation: Establishing Cleanup Standards and Selecting Cleanup Actions
97-1583	Voluntary Cleanup Program
01-09-045	Site Register
01-09-049	Developing Ground Water Cleanup Standards under the Model Toxics Control Act
01-09-050	Developing Surface Water Cleanup Standards under the Model Toxics Control Act
01-09-071	Developing Soil Cleanup Standards under the Model Toxics Control Act
01-09-072	Developing Air Cleanup Standards under the Model Toxics Control Act

Program Reports

02-09-042	2001 Annual Report
03-04-046	2002 Annual Report
20-09-043	State of Cleanup Report

Miscellaneous Publications

97-608	Brownfields Resource Guide
020-073	Voluntary Cleanup Program: Site Summary (Form)
020-074	Voluntary Cleanup Program: Request of Assistance (Form)
090-300	Voluntary Cleanup Program: Terrestrial Ecologic Exclusion (Form)
03-09-043	Sediment Sampling and Analysis Plan Appendix
R-TC-95-137	Private Right of Action
R-TC-98-600	Substantial Equivalence for Tax Exemptions
Web Page	Terrestrial Ecologic Evaluation Process—An Interactive Users Guide

November 8, 2001 Future “Short List” of Possible SAB Issues

Human Health Risk Assessment Issues

Soil Direct Contact Pathway

- Define “significance” for determining when the dermal exposure pathway must be evaluated
- IEUBK soil lead model

Ground Water Cleanup Levels

- Exposure scenarios for non potable ground water

Surface Water Cleanup Levels

- √ TPH surface water cleanup levels
- √ Bioconcentration/bioaccumulation factors for TPH EC fractions (also eco issue)
- √ WET testing—protocols and data interpretation

Remedy Selection

- Exposure scenarios for evaluating the protectiveness of soil remediation levels, including alternative land uses and soil covers
- Exposure scenarios for evaluating the protectiveness ground water remediation levels, including the effectiveness of institutional controls restricting ground water use

Other Human Health

- Additive risk considerations for mixtures of TPH and other contaminants (for 4-phase model as well as other risk calculations)

Ecological Issues

- Soil bioassay work TPH contaminated soil—review of experimental design, consultation on interpretation of resulting data
- √ WET testing—protocols and data interpretation
- √ Bioconcentration/bioaccumulation factors for TPH EC fractions

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Fate and Transport Issues

- √ Guidance for how to assign chemical parameters when there is variability in the literature (Henry's Constant, solubility, Koc)
- √ Guidance for how to factor in site variability for FOC

Empirical Methods

- Empirical demonstrations—how do you make this demonstration (required testing, data interpretation); what's required to determine a steady state condition exists

Natural Attenuation

- √ Natural attenuation guidance, including protocol for determining an appropriate biodegradation rate to use at a site

Fate and Transport—TPH Specific Issues

- √ TPH guidance-overall review
- √ Methods for evaluating site-specific variability in TPH fraction data
- √ Methanol preservation of samples
- Alcohol fuel issues—how to consider when establishing cleanup levels
- √ Laboratory method for establishing a site-specific residual saturation value
- Use of the soil attenuation model to account for biological degradation in the vadose zone

Vapor Pathway

- √ Define scientifically defensible model
- √ Define scientifically defensible assumptions (defaults for input parameters)
- √ Define protocols for vapor sampling (where and how it should be done, method for determining TPH EC fractions)
- √ Define “significance” for determining when the vapor pathway must be evaluated

Area-wide Contamination Task Force

- Board participation on the task force?
- Other scientific issues as identified by the task force